# **Fire Investigator**

# Certification Training Standards Guide February 2017





California Department of Forestry and Fire Protection Office of the State Fire Marshal State Fire Training

# **Fire Investigator**

# Certification Training Standards Guide February 2017

This CTS guide utilizes NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014) to provide the qualifications for State Fire Training's Fire Investigator certification.

State Fire Training coordinated the development of this CTS guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this CTS guide for adoption by the Office of the State Fire Marshal (OSFM).



Published by State Fire Training 1131 S Street, Sacramento, CA 95811 (916) 445-8200

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## **State Fire Training**

#### Mission

To enable the California Fire Service to safely protect life and property through education, training, and certification.

## The California Fire Services Training and Education System

The California Fire Service Training and Education System (CFSTES) was established to provide a single statewide focus for fire service training in California. CFSTES is a composite of all the elements that contribute to the development, delivery, and administration of training for the California fire service. The authority for the central coordination of this effort is vested in the Training Division of the California State Fire Marshal's Office with oversight provided by the State Board of Fire Services.

CFSTES facilitates, coordinates, and assists in the development and implementation of standards and certification for the California fire service. CFSTES:

- 1. Administers the California Fire Academy System
- 2. Provides accredited courses leading to certification and approved standardized training programs for local and regional delivery
- 3. Administers the national accreditation process in California
- 4. Publishes certification training standards, course plans, and a capstone task book for each certified level in the California fire service

CFSTES is a fire service system developed by the fire service, for the fire service. It is only as successful and effective as the people involved in it.

## Acknowledgments

State Fire Training appreciates the hard work and accomplishments of those who built the solid foundation on which this program continues to grow.

State Fire Training gratefully acknowledges the following individuals and organizations for their diligent efforts and contributions that made the development and publication of this document possible.

#### **CAL FIRE**

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#### **Partners**

State Fire Training also extends special acknowledgement and appreciation to the Conference and Training Services Unit with the College of Continuing Education at California State University, Sacramento, for its ongoing meeting logistics and curriculum development support, innovative ideas, and forward-thinking services. This collaboration is made possible through an interagency agreement between CAL FIRE and Sacramento State.

## How to Read a CTS Guide

State Fire Training develops a Certification Training Standards (CTS) Guide for a variety of job functions in the fire service such as firefighter, driver/operator, fire instructor, and company officer. The CTS guide lists the requisite knowledge and skills and the job performance requirements a person is expected to complete in order to become certified in a specific function. CTS guides are appropriate for fire service personnel and individuals in related occupations pursuing State Fire Training certification.

Each CTS guide serves as a foundation for the certification programs recommended for adoption by the Office of the State Fire Marshal. Any certification program must be based on job-related knowledge and measurable performance standards. To master the knowledge and skills needed for specialized operations, individuals will require additional training to augment the performance standards included in the CTS guide.

Within the CTS guide, it is impossible to capture the different policies and procedures of each organization in the California fire service. Individuals aspiring to meet State Fire Training's certification training standards must do so in accordance with the codes, standards, regulations, policies, and standard operating procedures applicable within their own departments or jurisdictions.

#### **Format**

Each certification training standard included in the CTS guide includes the following:

#### **Section Heading**

The section heading describes a general category for a group of training standards. For example, the Fire Marshal CTS includes the following sections: Administration, Risk Management, Community Relations, Professional Development, Regulatory Programs, Fire and Life Safety, and Investigation. Each section contains one or more individual training standards.

#### **Training Standard Title**

The training standard title provides a general description of the performance requirement contained within the standard.

#### **Authority**

The CTS guide references each standard with one or more paragraphs of the corresponding National Fire Protection Association (NFPA) Professional Qualifications. This ensures that each fire service function within California's certification system meets or exceeds NFPA standards.

When California requirements exceed the NFPA standard, the CTS guide cites the Office of the State Fire Marshal as the authority and prints the corresponding information in *italics*.

#### Given

This section lists the objects, equipment, materials, or facilities an individual needs in order to acquire the requisite knowledge and skills or to accomplish the job performance requirement(s) within a training standard.

## **Requisite Knowledge and Skills**

This section lists the knowledge and skills that an individual must acquire in order to accomplish the job performance requirement(s) within a training standard.

This section does not include NFPA requisite knowledge or skills that are too general to teach or that individuals should develop through life experiences. For example, a training standard would not list "communicate orally and in writing" or "ability to relate interpersonally" unless they specifically apply to a job performance requirement about acquiring communication skills or developing interpersonal relationships.

## **Job Performance Requirements**

This section includes one or more written statements that describe a specific job-related task and define measurable or observable outcomes. After an individual completes all coursework and requisite requirements, the capstone task book process verifies completion of job performance requirements.

#### Content

In addition to the individual certification training standards, the CTS guide also includes State Fire Training Revisions and Errata pages.

## **State Fire Training Content**

Located at the back of the CTS guide, this table documents any significant revisions made by State Fire Training to the NFPA standards in the development of this CTS guide. This table is used to justify content additions and advise the course plan development team.

#### **Errata**

Located at the back of the CTS guide, this page documents any changes made to the CTS guide outside of the five-year NFPA revision cycle.

## **Fire Investigator**

## **Section 1: Scene Examination**

## 1-1: Securing the Fire Ground

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.1
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Marking devices, tools, and equipment
- 3. Sufficient personnel

## **Requisite Knowledge and Skills**

- 1. Identify fire ground hazards
- 2. Identify the types of evidence
- 3. Discuss marking devices and equipment used for securing the scene
- 4. *Describe* the importance of fire scene security, evidence preservation, and issues relating to spoliation
- 5. Use marking devices, tools, and equipment

## **Job Performance Requirements**

1. Secure the fire ground to protect all evidence or potential evidence from damage or destruction and ensure unauthorized persons recognize the perimeters of the investigative scene and are kept from the restricted areas.

## 1-2: Conducting an Exterior Survey

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.2
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Camera
- 3. Graph paper and note pad
- 4. Tools and equipment

#### **Requisite Knowledge and Skills**

- 1. Describe the types of building construction
- 2. Recognize the effects of fire on construction materials
- 3. Recognize the types of evidence commonly found in the perimeter
- 4. Describe evidence preservation methods
- 5. Describe the effects of fire suppression
- 6. Describe fire behavior and spread
- 7. Recognize fire patterns
- 8. Recognize the dangers of hazardous materials
- 9. Assess fire ground and structural condition
- 10. Observe the damage from and effects of the fire
- 11. Interpret fire patterns
- 12. Identify weather conditions at the time of the fire

## **Job Performance Requirements**

1. Conduct an exterior survey to identify and preserve evidence, interpret fire damage, identify hazards to avoid injuries, determine accessibility to the property, and discover all potential means of ingress and egress.

## 1-3: Conducting an Interior Survey

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.3
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Camera
- 3. Graph paper and note pad
- 4. Tools and equipment

#### **Requisite Knowledge and Skills**

- 1. Describe the types of interior finishes
- 2. Recognize the effects of fire on interior finishes
- 3. Recognize the effects of fire suppression
- 4. Describe fire behavior and spread
- 5. Recognize the effects of building contents on fire growth
- 6. Describe the relationship of building contents to the overall investigation
- 7. Assess structural conditions
- 8. Observe the damage and effects of the fire
- 9. Determine the impact of fire suppression efforts on fire flow and heat propagation
- 10. Evaluate protected areas to determine the presence and/or absence of contents

#### **Job Performance Requirements**

1. Conduct an interior survey to identify and preserve areas of potential evidentiary value requiring further examination, determine the evidentiary value of contents, and identify hazards to avoid injuries.

## 1-4: Interpreting Individual Fire Patterns

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.4
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Tools and equipment

## **Requisite Knowledge and Skills**

- 1. Describe fire dynamics
- 2. Discuss fire development
- 3. Describe the relationship of heat release rate, form, and ignitibility of materials
- 4. Interpret the effects of burning characteristics on different types of materials

## **Job Performance Requirements**

1. Interpret individual fire patterns and the burning characteristics of the material involved in relationship with all patterns observed and the mechanisms of heat transfer that led to the formation of the pattern.

#### 1-5: Analyzing Fire Patterns

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.5
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Tools and equipment

## **Requisite Knowledge and Skills**

- 1. Recognize fire behavior and spread based on fire chemistry, fire dynamics, and fire physics
- 2. *Identify* the effects fire suppression has on fire patterns
- 3. Describe the effects building construction has on fire patterns
- 4. *Analyze* variations of fire patterns on different materials with consideration given to heat release rate, form, and ignitibility
- 5. Distinguish impact of different types of fuel loads
- 6. Evaluate fire spread based on fuel load
- 7. Analyze information

## **Job Performance Requirements**

1. Analyze fire patterns to determine fire development, evaluate methods and effects of suppression, recognize false origin area patterns, and identify all areas of origin.

## 1-6: Examining and Removing Fire Debris

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.6
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Tools and equipment
- 3. Evidence collection materials

## **Requisite Knowledge and Skills**

- 1. Recognize ignition processes
- 2. Describe the characteristics of ignition sources
- 3. Describe the ignitability of various fuels
- 4. Discuss the use of tools and equipment during the debris search
- 5. Describe layering techniques for debris removal
- 6. Identify the types of fire-cause evidence found in debris
- 7. Describe evidence-gathering methods and documentation
- 8. Employ search techniques that further the discovery of fire cause evidence and ignition sources
- 9. Use search techniques that incorporate documentation
- 10. Collect and preserve evidence

#### **Job Performance Requirements**

1. Examine and remove fire debris to check for fire cause evidence, identify potential ignition source(s), and preserve evidence without investigator-inflicted damage or contamination.

## 1-7: Reconstructing the Area of Origin

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.7
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Tools and equipment
- 3. Sufficient personnel

## **Requisite Knowledge and Skills**

- 1. Describe the effects of fire on different types of material
- 2. Describe the process of reconstruction
- 3. Describe the importance and uses of reconstruction
- 4. Examine all materials to determine the effects of fire
- 5. Identify and distinguish among different types of fire-damaged contents
- 6. Return materials to their original position using protected areas and fire patterns

## **Job Performance Requirement**

1. Reconstruct the area of origin to identify and correlate all protected areas and fire patterns related to contents or structural remains, return items potentially critical to cause determination and photo documentation to their prefire location, and discover the area(s) or point(s) of origin.

## 1-8: Inspecting the Performance of Building Systems

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.8
- 2. Office of the State Fire Marshal

#### Given

- 1. Building systems
- 2. Tools and equipment

## **Requisite Knowledge and Skills**

- 1. Recognize different types of detection, suppression, HVAC, utility, and building compartmentation
- 2. Identify the types of expert resources for building systems
- 3. Describe the impact of fire on various systems
- 4. Describe common methods used to defeat a system's functional capability
- 5. Explain the types of building system failures
- 6. Determine the system's operation and its effect on the fire
- 7. Identify alterations to, and failure indicators of, building systems
- 8. Evaluate the impact of suppression efforts on building systems

## **Job Performance Requirements**

1. Inspect the performance of building systems, including detection, suppression, HVAC, utilities, and building compartmentation to determine the need for expert resources, consider an operating system's impact on fire growth and spread in identifying origin areas, identify defeated and/or failed systems, and recognize the system's potential as a fire cause.

## 1-9: Discriminating the Effects of Explosions

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.2.9

#### Given

- 1. A fire/explosion scene
- 2. Tools and equipment

## **Requisite Knowledge and Skills**

- 1. Describe the different types of explosions and their causes
- 2. Describe the characteristics of an explosion
- 3. Explain the difference between low- and high-order explosions
- 4. Identify explosive effects on glass, walls, foundations, and other building materials
- 5. Distinguish between low- and high-order explosion effects
- 6. Analyze damage to document the blast zone and origin

## **Job Performance Requirements**

1. Discriminate the effects of explosions from other types of damage to identify an explosion and preserve its evidence.

## **Section 2: Scene Documentation**

## 2-1: Diagramming the Scene

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.3.1
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Graph paper and note pad
- 3. Tools and equipment

## **Requisite Knowledge and Skills**

- 1. Describe symbols and legends used to clarify the diagram
- 2. Describe the types of evidence and patterns that need to be documented
- 3. Discuss formats for diagramming the scene
- 4. Sketch the scene
- 5. Perform basic drafting skills
- 6. Recognize evidence
- 7. Use observational skills

## **Job Performance Requirements**

1. Diagram the scene and identify evidence, pertinent contents, significant patterns, and area(s) or point(s) of origin.

## 2-2: Photographing the Scene

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.3.2
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Tools and equipment

## **Requisite Knowledge and Skills**

- 1. Discuss the types of cameras and flash
- 2. Discuss the types of film, media, and flash available
- 3. Describe the strengths and limitations of cameras, media, and flash
- 4. Describe the process of photographing the scene
- 5. Use a camera, flash, and accessories

## **Job Performance Requirements**

1. Photograph the scene to accurately document and support scene findings.

## 2-3: Constructing Investigative Notes

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.3.3
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Available documents (e.g., prefire plans and inspection reports)
- 3. Interview information

## **Requisite Knowledge and Skills**

- 1. Describe the relationship between notes, diagrams, and photos
- 2. Describe translating scene information into concise notes
- 3. Discuss using notes during report writing and legal proceedings
- 4. Use data-reduction skills
- 5. *Use* note-taking skills
- 6. Use observation and correlation skills

## **Job Performance Requirements**

1. Construct investigative notes that provide accurate documentation of the scene and represent complete scene findings.

## **Section 3: Evidence Collection/Preservation**

## 3-1: Processing Victims and Fatalities

## Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.4.1
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene with victim(s)
- 2. Relevant protocols for the AHJ
- 3. Tools and equipment
- 4. Appropriate personnel

## **Requisite Knowledge and Skills**

- 1. Recognize the types of evidence associated with fire victims and fatalities
- 2. Discuss evidence preservation methods
- 3. Use observational skills
- 4. Apply protocols to given situations

## **Job Performance Requirements**

1. Process victims and fatalities to discover and preserve all evidence while utilizing proper procedures and following protocol.

## 3-2: Processing Evidence and Establishing Chain of Custody

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.4.2
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Authority requirements for establishing a chain of custody
- 3. Evidence collection materials
- 4. Tools and equipment

#### **Requisite Knowledge and Skills**

- 1. Describe the authority requirements for establishing a chain of custody
- 2. *Describe the* impact of removing evidentiary items on civil or criminal proceedings (exclusionary or fire-cause supportive evidence)
- 3. *Explain* the types, capabilities, and limitations of tools *and equipment* used to locate evidence
- 4. *Identify the* types of laboratory tests available
- 5. Discuss packaging techniques and materials
- 6. Explain the impact of evidence collection on the investigation
- 7. Recognize different types of evidence
- 8. Determine whether evidence is critical to the investigation

#### **Performance Requirements**

1. Locate, document, collect, label, package, and store evidence to properly identify and preserve for use in testing, legal, or other proceedings and examinations, establish the chain of custody, and avoid cross-contamination and investigator-inflicted damage to evidentiary items.

## 3-3: Selecting Evidence for Analysis

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.4.3
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Information and evidence collected from the investigation

## **Requisite Knowledge and Skills**

- 1. Explain the purposes for submitting items for analysis
- 2. *Identify the* types of analytical services available
- 3. Describe the capabilities and limitations of the services performing the analysis
- 4. Evaluate the fire scene to determine forensic, engineering, or laboratory needs

## **Job Performance Requirements**

1. Select evidence for analysis so the items support specific investigation needs.

## 3-4: Maintaining a Chain of Custody

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.4.4
- 2. Office of the State Fire Marshal

#### Given

- 1. Tools and equipment
- 2. Evidence collection materials

## **Requisite Knowledge and Skills**

- 1. Explain the rules of custody and transfer procedures
- 2. Describe methods of recording the chain of custody
- 3. Execute the chain of custody procedures
- 4. Accurately complete necessary documents

## **Job Performance Requirements**

1. Maintain a chain of custody with written documentation for each piece of evidence.

## 3-5: Disposing of Evidence

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.4.5
- 2. Office of the State Fire Marshal

#### Given

- 1. Judicial or statutory requirements
- 2. Jurisdictional or agency requirements
- 3. Information and evidence collected from the investigation

## **Requisite Knowledge and Skills**

- 1. Discuss judicial or statutory requirements for disposal
- 2. Identify disposal services available
- 3. Describe common disposal procedures and problems
- 4. Use documentation skills

## **Job Performance Requirements**

1. Dispose of evidence safely in compliance with jurisdictional or agency requirements.

## **Section 4: Interview**

## 4-1: Developing an Interview Plan

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.5.1
- 2. Office of the State Fire Marshal

#### Given

- 1. A fire scene
- 2. Tools and equipment
- 3. Existing file data if available

## **Requisite Knowledge and Skills**

- 1. *Identify* persons who can provide information that furthers the fire cause determination and responsibility
- 2. *Determine the* types of questions that are pertinent and efficient to ask of different information sources
- 3. Discuss the pros and cons of interview techniques
- 4. *Use* planning skills
- 5. Develop focused questions for specific individuals
- 6. Evaluate existing file data to help develop questions and fill investigative gaps

#### **Job Performance Requirements**

 Develop an interview plan to assist in determining the fire origin/cause and responsibility that includes relevant questioning for each interviewee and promotes the efficient use of the investigator's time.

## 4-2: Conducting an Interview

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.5.2
- 2. Office of the State Fire Marshal

#### Given

- 1. Incident information
- 2. Legal requirements
- 3. Tools and equipment

## **Requisite Knowledge and Skills**

- 1. *Identify the* types of interviews
- 2. Describe the legal requirements for interviews
- 3. *Describe the* personal *identifying* information needed for proper documentation or follow-up
- 4. Explain documenting methods and tools
- 5. Describe verbal and nonverbal communications and their meanings
- 6. Describe interviewing strategies
- 7. Adjust interviewing strategies based on information gathered
- 8. Interpret verbal and nonverbal communications
- 9. Apply applicable legal requirements
- 10. Exhibit strong listening skills

## **Job Performance Requirements**

1. Conduct an interview that obtains pertinent information, asks follow-up questions, elicits responses to all questions, and documents the response to each question.

## 4-3: Evaluating Interview Information

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.5.3

#### Given

- 1. Interview transcripts or notes
- 2. Incident data

## **Requisite Knowledge and Skills**

- 1. Describe how to evaluate interview information
- 2. Identify data correlation methods
- 3. Use data correlation skills
- 4. Evaluate source information

## **Job Performance Requirements**

1. Evaluate interview information in order to analyze and correlate all interview data with all other interviews, document corroborative and conflictive information, and develop new leads.

## **Section 5: Post Incident Investigation**

## 5-1: Gathering Reports and Records for a Legal Proceeding

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.6.1
- 2. Office of the State Fire Marshal

#### Given

1. Reports and records from the investigation

## **Requisite Knowledge and Skills**

- 1. *Describe the* types of reports *and records* needed that facilitate determining responsibility for the fire
- 2. Identify the location of these reports and records
- 3. Identify the reports and records necessary for the investigation
- 4. Implement the chain of custody
- 5. Use organizational skills

## **Job Performance Requirements**

1. Gather reports and records for a legal proceeding that are authentic, complete, and applicable to the investigation while maintaining the chain of custody to ensure the material is admissible.

## 5-2: Evaluating the Investigative File

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.6.2

#### Given

1. All available case file information

#### **Requisite Knowledge and Skills**

- 1. Describe the case file assessment and/or evaluation process
- 2. Use information assessment skills
- 3. Use correlation skills
- 4. Use organizational skills

## **Job Performance Requirements**

1. Evaluate the investigative file to identify areas for further investigation, interpret the relationship between gathered documents and information, and discover corroborative evidence and information discrepancies.

## 5-3: Coordinating Expert Resources

## Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.6.3
- 2. Office of the State Fire Marshal

#### Given

- 1. Case file
- 2. Evidence

## **Requisite Knowledge and Skills**

- 1. Describe how to assess one's own expertise
- 2. Identify the qualifications of an expert witness
- 3. *Identify the* types of expert resources
- 4. *Discuss the need for* expert resources
- 5. Network with other investigators to identify expert resources
- 6. Develop a utilization plan for *using* expert resources
- 7. Question experts relative to their qualifications
- 8. Apply expert resources to further the investigation

## **Job Performance Requirements**

1. Coordinate expert resources to match expert's competencies to the specific investigation needs, justify financial expenditures, and further the investigative goals of determining cause and responsibility.

## 5-4: Establishing Evidence as to Means, Motive, and Opportunity

#### Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.6.4
- 2. Office of the State Fire Marshal

#### Given

- 1. An incendiary fire scene
- 2. Case file
- 3. Evidence

## **Requisite Knowledge and Skills**

- 1. Identify means common to incendiary fires
- 2. Discuss motives common to incendiary fires
- 3. Identify methods used to discover opportunity
- 4. Discuss human behavioral patterns relative to fire-setting
- 5. Analyze finances
- 6. Gather and analyze records
- 7. Interpret fire scene information and evidence for relationship to means, motive, and opportunity

## **Job Performance Requirements**

1. Establish evidence as to means, motive, and opportunity that is supported by documentation and meets evidentiary requirements.

## 5-5: Formulating an Opinion

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.6.5

#### Given

1. Case file

## **Requisite Knowledge and Skills**

- 1. Describe analytical methods and procedures
- 2. Use analytical skills

## **Job Performance Requirements**

1. Formulate an opinion concerning origin, cause, and responsibility for the fire supported by data, facts, records, reports, documents, and evidence.

## **Section 6: Presentation**

## 6-1: Preparing a Fire Investigation Report

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.7.1
- 2. Office of the State Fire Marshal

#### Given

- 1. Case file
- 2. Tools and equipment
- 3. A specific audience

## **Requisite Knowledge and Skills**

- 1. Discuss the elements of writing
- 2. Describe the typical components of a fire investigation report
- 3. Identify the types of audiences and their respective needs or requirements
- 4. Use writing skills
- 5. Analyze information
- 6. Determine the audience's needs or requirements

#### **Job Performance Requirements**

1. Prepare a report that accurately reflects the investigative findings, is concise, expresses the investigator's opinion, and contains facts and data that the investigator relies on in rendering an opinion, contains the reasoning of the investigator to reach each opinion, and meets the needs or requirements of the intended audience.

## 6-2: Presenting Investigative Findings

## **Authority**

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.7.2

#### Given

- 1. Case file
- 2. A specific audience

## **Requisite Knowledge and Skills**

- 1. Discuss the types of investigative findings
- 2. Identify informational needs of various types of audiences
- 3. Discuss the impact of releasing information
- 4. Use communication skills
- 5. Determine audience needs
- 6. Correlate findings

## **Job Performance Requirements**

1. Present investigative findings that are accurate and include only need-to-know information for the intended audience.

## 6-3: Testifying During Legal Proceedings

## Authority

- 1. NFPA 1033 Standard for Fire Investigator Professional Qualifications (2014)
  - Paragraph 4.7.3

#### Given

- 1. Consultation with legal counsel
- 2. Case file

## **Requisite Knowledge and Skills**

- 1. Discuss the types of investigative findings within the case file
- 2. Discuss courtroom etiquette, professional demeanor, and attire
- 3. Discuss due process and legal proceedings
- 4. Use communication and listening skills
- 5. Differentiate facts from opinion
- 6. Use acceptable procedures, practices, and etiquette during legal proceedings

#### **Job Performance Requirements**

1. Testify during legal proceedings to present all pertinent investigative information and evidence clearly and accurately while adhering to the appropriate demeanor and attire.

## Section 7: Wildland Fire Origin and Cause Determination

## 7-1: Introduction to Wildland Fire Origin and Cause Determination

## **Authority**

Office of the State Fire Marshal

#### Given

- 1. A wildland fire scene
- 2. Wildland fire evidence
- 3. Tools and equipment

## **Requisite Knowledge and Skills**

- 1. Describe the common roles and responsibilities of a wildland fire investigator involved in an initial investigation environment
- 2. Discuss wildland fire investigation methods, evidence collection, and documentation processes in a realistic environment
- 3. Identify the laws, regulations, and related court procedures associated with administrative, civil, and criminal litigation processes associated with a wildland fire
- 4. Describe the fundamentals of a wildland fire investigation
- 5. Identify the elements of the professional code of ethics for fire investigators

## **Job Performance Requirements**

1. Investigate a wildland fire ensuring wildland fire investigation methods are used, evidence is collected and documented, and the laws, regulations, and related court procedures associated with administrative, civil, and criminal litigation processes are followed.

# **State Fire Training Content**

#### **Code Key**

#### **Blocks**

- G = Given
- RKS = Requisite Knowledge and Skills
- JPR = Job Performance Requirements
- NCTS = New certification training standard

#### Sources

- NFPA 1033 = Standard for Fire Investigator Professional Qualifications (2014)
- NFPA 921 = Guide for Fire and Explosion Investigations (2014)
- OSFM = Office of the State Fire Marshal

## **Certification: Fire Investigator**

CTS	Block	Addition	Justification	Source/Reference
1-1	G	A fire scene	Needed to complete the JPR	NFPA 1033
1-1	RKS	Discuss marking devices and equipment used for securing the scene	Needed to complete the JPR	NFPA 921
1-2	G	A fire scene	Needed to complete the JPR	NFPA 1033
1-3	G	A fire scene	Needed to complete the JPR	NFPA 1033
1-4	G	A fire scene	Needed to complete the JPR	NFPA 1033
1-5	G	A fire scene	Needed to complete the JPR	NFPA 1033
1-6	G	A fire scene	Needed to complete the JPR	NFPA 1033
1-7	G	A fire scene	Needed to complete the JPR	NFPA 1033
1-7	RKS	Describe the process of reconstruction	Needed to complete the JPR	NFPA 921
1-8	G	Building systems	Needed to complete the JPR	NFPA 1033
1-9	G	A fire/explosion scene	Needed to complete the JPR	NFPA 1033
2-1	G	A fire scene	Needed to complete the JPR	NFPA 1033
2-1	G	Graph paper and note pad	Needed to complete the JPR	NFPA 1033
2-2	G	A fire scene	Needed to complete the JPR	NFPA 1033
2-2	RKS	Describe the process of photographing the scene	Needed to complete the JPR	NFPA 921
2-3	G	A fire scene	Needed to complete the JPR	NFPA 1033
3-1	G	A fire scene with victim(s)	Needed to complete the JPR	NFPA 1033
3-1	G	Tools and equipment	Needed to complete the JPR	NFPA 1033
3-2	G	A fire scene	Needed to complete the JPR	NFPA 1033
3-2	G	Authority requirements for establishing a chain of custody	Needed to complete the JPR	NFPA 1033

CTS	Block	Addition	Justification	Source/Reference
3-3	G	A fire scene	Needed to complete the JPR	NFPA 1033
3-5	G	Judicial or statutory requirements	Needed to complete the JPR	NFPA 1033
3-5	RKS	Discuss judicial or statutory requirements for disposal	Needed to complete the JPR	NFPA 921
4-1	G	A fire scene	Needed to complete the JPR	NFPA 1033
4-2	G	Legal requirements	Needed to complete the JPR	NFPA 1033
4-2	G	Tools and equipment	Needed to complete the JPR	NFPA 1033
4-2	RKS	Describe the legal requirements for interviews	Needed to complete the JPR	NFPA 921
4-2	RKS	Describe interviewing strategies	Needed to complete the JPR	NFPA 921
5-1	G	Reports and records from the investigation	Needed to complete the JPR	NFPA 1033
5-3	G	Case file	Needed to complete the JPR	NFPA 1033
5-3	G	Evidence	Needed to complete the JPR	NFPA 1033
5-4	G	Case file	Needed to complete the JPR	NFPA 1033
5-4	G	Evidence	Needed to complete the JPR	NFPA 1033
5-4	RKS	Identify means common to incendiary fires	Needed to complete the JPR	NFPA 921
6-1	G	Tools and equipment	Needed to complete the JPR	NFPA 1033
7-1	NCTS	Introduction to Wildland Fire Origin and Cause Determination	The landscape environment in California requires this training	OSFM